

U.S. Application No. 10/502,117
Reply to Office Action of August 23, 2006
Amendment dated: January 23, 2007

REMARKS:

In regard to the Examiner's rejection of claims 1-3 under 35 U.S.C. § 102 as being anticipated by Kubota (U.S. Patent No. 6,183,669), The Applicant respectfully submits that either Kubota ('669) and Geller et al. ('510), whether considered separately or in combination, do not teach or suggest that the organic layer be formed from among: liquid crystal polymer, benzocyclobutene, polyimide, polynorbornen, polyphenylether, polytetrafluoroethylene, bismaleimide-triazine, liquid crystal polymer having a ceramic powder dispersed therein, benzocyclobutene having a ceramic powder dispersed therein, polyimide having a ceramic powder dispersed therein, polynorbornen having a ceramic powder dispersed therein, polyphenylether having a ceramic powder dispersed therein, polytetrafluoroethylene having a ceramic powder dispersed therein, or bismaleimide-triazine having a ceramic powder dispersed therein, as required by the currently claimed invention.

Indeed, Kubota only teaches or suggests a compound which suppresses "gel formation slurry prepared by mixing an organic polymer compound having acidic functional groups with a ceramic powder and glass powder containing multivalent metals or their oxides." (Column 3, 10-15). The composition is made of a paste of "(A) an organic binder comprising acidic functional groups, (B) an inorganic powder containing multivalent metal compounds, and (C) a mono-ol compound having a boiling point of about 178 degrees C. or more." (Col. 3, ln 30-40, *emphasis added*; see also Col. 4, ln 40-50). The Applicant respectfully submits that the combination of these three compounds recited by the prior art does not correspond to any combination of the compounds of the

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currently claimed invention. The Applicant's respectfully submit that the claimed invention does not require a mono-ol compound as required by the prior art. (See *supra*). Consequently, the Applicant respectfully submits the claims 1-3 currently stand in condition for allowance.

In regard to the Examiner's rejection of claims 5-6, 8-9, 11-12, and 14 under 35 U.S.C. § 102 as being anticipated by Geller et al. (U.S. Patent No. 5,929,510), the Applicant respectfully submits the Geller does not teach or suggest all the limitations of the currently claimed invention. Specifically, Geller fails to teach or suggest an organic insulator layer formed of any one of the organic materials recited in the claims or any one of the organic materials cited in the claims also having a ceramic powder dispersed therein. The Applicant respectfully submits that there is no teaching or suggestion whatsoever in Geller directed towards the use of any organic material. In fact, Geller teaches and suggests the exact opposite stating that the body 13 is formed of a first relatively thick layer 16 of an *inorganic* dielectric material, and that the on first dialectic layer 16 there is a second relatively thick layer 30 of an *inorganic* dielectric material. (Column 2, In 14 and 29).

The Applicant respectfully submits that no point does Geller teach or suggest the use of any organic compound as required by the currently claimed invention, much less the specific organic compounds of the currently claimed invention. The Applicant respectfully submits that merely reciting that a layer includes ceramic powder is not equivalent to requiring that a layer be made of a specific organic compound with or without a ceramic powder dispersed therein as required by the currently claimed invention. Therefore, Geller fails to teach or suggest all of the limitations of the currently

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claimed invention and cannot serve as the basis of a § 102 rejection. Consequently, the Applicant respectfully submits that claims 5-6, 8-9, 11-12, and 14 currently stand in condition for allowance.

In regard to the Examiner's rejection of claims 7 and 13 under 35 U.S.C. § 103 as being unpatentable over Geller et al. ('510) in view of Kamimura et al. (U.S. Patent No. 5,373,112), the Applicant respectfully submits that, as stated above, Geller fails to teach or suggest an organic insulator layer formed of any one of the organic materials recited in claim or any one of the organic materials cited in the claim also having a ceramic powder dispersed therein. Additionally, Kamimura fails to teach or suggest an organic insulator layer formed of any one of the organic materials required by the currently claimed invention with or without a ceramic powder dispersed therein. Therefore, the Applicant respectfully submits that both Geller and Kamimura, whether considered separately or in combination, fail to teach or suggest all of the limitations of the currently claimed invention. Consequently, the Applicant respectfully submits that claims 7 and 13 currently stand in condition for allowance.

In regard to the Examiner's rejection of claims 16-19 under 35 U.S.C. § 103 as being unpatentable over Geller ('510) in view of Prior Art (Fig.5, submitted by the Applicant), the Applicant respectfully submits that both Geller and the Applicant's admitted Prior Art, whether considered separately or in combination, fail to teach or suggest an organic layer formed of any one of the organic materials recited in the claims or any one of the organic materials recited in the claims also having a ceramic powder

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dispersed therein. Consequently the Applicant respectfully submits that claims 16-19 currently stand in condition for allowance.

Finally, the Applicant's respectfully request that the Examiner consider the new claim directed to an alternate embodiment of the currently claimed invention. The Applicant's respectfully submit that the prior art, whether considered separately or in combination, fails to teach or suggest the formation of passive elements opposite pattern openings. This configuration provides for passive elements that do not have the self-resonant frequency thereof deteriorated by a capacitance developed between them and the ground pattern and the performances thereof deteriorated due to a reduction of the quality factor Q. (See page 36).

The Applicant respectfully submits that the prior references cited by the Examiner, whether considered separately or in combination, fail to teach or suggest an organic insulative layer formed from among the liquid crystal polymer, benzocyclobutene, polyimide, polynorbornen, polyphenylether, polytetrafluoroethylene, bismaleimide-triazine, which is low in specific inductive capacity and loss, or any one of these organic materials also having a ceramic powder dispersed therein, as required by the currently claimed invention. The Applicant respectfully requests that the Examiner reconsider the rejections in light of the foregoing remarks. The Applicant respectfully submits that all claims currently stand in condition for allowance. The Applicant

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respectfully requests that the Examiner withdraw the rejections and place these claims in condition for allowance.

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Respectfully Submitted,

(Reg. #37,607)

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